

SUPPORTING SUSTAINED GROWTH AMONG SMES – POLICY MODELS AND GUIDELINES

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Supporting Sustained Growth Among SMEs – Policy Models and Guidelines

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Executive Summary

Among SMEs high growth is often episodic and not sustained. How can we best support SMEs to achieve sustained growth? In this paper we review a number of international support measures designed to give SMEs the capabilities and resources to sustain fast growth. The paper draws on evidence compiled in a recent international benchmarking exercise undertaken by the authors with the OECD-LEED programme. Policy guidelines emerge suggesting the need for partnership, for regionalised delivery and the potential value of holistic supports for sustained growth.

Support measures are of three main types:

- Systemic measures which focus on informational or strategic market failures and aim to remedy perceived weaknesses or blockages in innovation or entrepreneurship systems.
- Holistic approaches which combine business development and leadership development. These schemes are either place-based or based on a long-term and intensive relationship between support scheme staff and SMEs.
- Functional or thematic approaches which focus more narrowly on financial support, on management and leadership development or technology adoption or use.

Reviewing these schemes suggests seven design or implementation guidelines for measures aiming to support sustained growth. These are:

 Enabling effective self-selection - a strong element of selfselection is inevitable in the provision of support for sustained growth. Enabling effective self-selection by firms requires a clear proposition from the scheme as well as a clear statement of required commitments. The proposition needs to be both ambitious



and emotionally engaging, participating in the scheme needs to carry a certain cachet.

- 2. Selecting participants a strong element of selectivity by the scheme itself is also necessary as these programmes are typically intensive and often involve peer-group and shared-learning activities.
- Recognising spill-overs selectivity should include the notion of 'national benefits', positive spill-overs which may be stronger from some SMEs than others.
- Sustained engagement schemes to support sustained growth are likely to involve continued engagement with a business over a period of years.
- 5. **Holistic approaches** Supporting sustained growth is likely to require a holistic rather than thematic support model, with a dual focus on the development of the business and the capabilities of the firm's leadership team.
- Partnership based measures to support sustained growth should be partnership based drawing on the expertise and networks of a range of support organisations.
- 7. **Delivery is likely to be regionally organised** a regional model has proved valuable in facilitating attendance by firms at scheme events and sessions and making face-to-face mentoring and peergroup sessions more feasible.

Over the next couple of months ERC aim to develop concrete proposals for improving the support for sustained SME growth in the UK. We welcome comments or suggestions which we can consider.



1. SME growth and the contribution to national job growth

1.1 Introduction

Numerous empirical studies have demonstrated the importance of growing SMEs in creating new jobs and introducing and commercialising radical innovations. One recent academic review of over twenty empirical studies concluded that: 'a few rapidly growing firms generate a disproportionately large share of all net new jobs compared to non-high-growth firms. This is a clear-cut result'. The evidence for different countries suggests that in general terms around 4-6 per cent of fast growing firms produce around half to three-quarters of all new jobs. One other result evident from the research literature is that fast growing firms occur in all sectors with some studies suggesting that they are over-represented in services. Their potential to generate growth means that fast growing SMEs can act as catalysts for change, helping economies to recover from recession and rebalance.

In this Section we briefly review the UK evidence on the contribution of growing firms to the UK economy in recent years. Subsequent Sections focus on support measures for sustained growth drawing on evidence from a recent international benchmarking exercise undertaken by the authors with the OECD-LEED programme. The aim is to identify examples of leading practice in supporting sustained growth which might aid the UK in developing future policy support. The guidelines which emerge suggest the need for partnership, for regionalised delivery and the potential value of holistic approaches to business support which develop both the firm and its leadership team.

Throughout the paper we focus on sustained growth as an alternative to the more common focus on high-growth. This is a deliberate choice to reflect our view that it is not only 'high-growth' firms – in the OECD sense – which actually matter but that policy should consider a broader, and therefore much larger group, of firms with the potential for sustained



growth. Broadening the definition also allows us to include in the discussion a range of international policy initiatives which would have been excluded if we focussed on high-growth narrowly defined.

1.2 Growth firms and their contribution to jobs in the UK¹

Deriving estimates of the contribution of growing firms to overall job growth is complex and, as we shall see, different approaches suggest rather different results. Applying the standard OECD definition of high growth in particular suggests rather different results – or at least gives a rather different impression of the dynamics of growth – than other approaches. In the OECD definition a high-growth firm (HGF) is that the firm must be alive at the beginning and end of the period of growth being considered and;

- has at least 10 employees at the beginning of the period;
- records an annual average growth of 20% in employment or turnover over the period being considered.

The proportion of HGFs can then be calculated, dividing by the number of firms (in the balanced panel) with 10 or more employees.

The first attempt to calculate the contribution of HGFs to job creation in the UK economy showed that they represented only 6% of all UK firms employing ten or more people (11,530 firms in 2008), and an even smaller proportion of the total number of firms. However, HGFs generated a majority of jobs (1.3 million out of 2.4 million new jobs created by established businesses employing ten or more people in the previous three years, or 54%).² Whilst this was useful in underlining the importance of this small group of firms to job creation, this analysis tells only part of the story both because of the specific method being used and because of the rather narrow focus on HGFs.



In terms of the approach being adopted, there are four plausible ways to measure the proportion of jobs created by high growth (or growing) firms with the key point being how the denominator - 'all jobs created' - is measured. Should it be based on:

- Definition 1 Jobs created in all job creating firms including new firms;
- Definition 2 Jobs created in all firms alive at the end of the period;
- Definition 3 Jobs created in all firms alive at the start of the period; or, Definition 4 - Jobs created in job creating firms alive at the start of the period with 10 or more employees?

Calculating the contribution of HGFs to UK job creation using these four different definitions of all jobs created suggests the following, very different, results:

- Definition 1: HGF contribution to job creation averages around 27% from 1998/2001 to 2004/07, and from 2005/08 to 2007/10 the average is 22%, five percentage points lower.
- Definition 2: Excluding new firms, the HGF contribution to jobs follows a similar path with a 44% average in the early period and in the later period almost 10 percentage points down, at around 35%.
- Definition 3: The time path for the share of HGFs in job creation by the OECD balanced panel is very similar, essentially parallel to the second definition, and the HGF share drops from an average of 47% in the early period to 38% from 2007/10.
- Definition 4: Finally we have HGF job creation as a share of jobs created by members of the OECD balanced panel with more than 10 employees. Here the figures are higher (as the denominator is



smaller) but again the share is down ten percentage points, from 60% in the years and 50% in more recent years.

Two issues stand out here. First, the apparent contribution of HGFs to job creation differs markedly depending on the approach adopted. Perhaps the most intuitive of these measures, however, is the first one which suggests that HGFs created on average 22-27 per cent of *all* new jobs over the 1998-2010 period. Specifically over the most recent 2007-10 period, HGFs on the OECD definition accounted for 1 per cent of all firms but 22 per cent of all new jobs created. Second, irrespective of the approach used the proportional contribution of high growth firms to job creation fell significantly post-2005 in the UK.

High growth is only part of the picture, however as rapid growth often seems episodic for many firms. Two recent UK studies provide some empirical evidence of the importance of this. One study which investigated the growth profile of a group of 100 fast-growth UK firms which achieved mean sales growth of 36 per cent p.a. between 1992 and 1996 concluded: 'surviving gazelles grew by just 8 per cent between 1996 and 2001. Thus, gazelle-like growth appears to be fragile, having failed to persist over a decade, even in a period of impressive macroeconomic growth'³. Based on a broader analysis of all UK firms, a second study reaches an essentially similar conclusion: 'Not only was the experience of high-growth relatively rare, but multiple instances were even rarer, affecting only one-third of high-growth firms'⁴.

1.3 Emerging policy issues

Fast growth or high growth firms can make a substantial contribution to job growth, particularly if growth can be sustained. Supporting sustained growth, however, poses a number of policy issues. First, the relative rarity of firms with significant growth potential poses problems in targeting support on the 'right' firms. As we shall see in the policy examples



considered later in this paper a number of different solutions have been developed.

Secondly, it is worth considering what type (or types) of support is needed to generate sustained growth? Are the key issues around finance, or leadership skills, or both? Third, is the issue of the timing of support: When is it best to intervene or offer business support? And, how do these support needs change as the business grows and develops? Fifth, questions arise about the level at which support should be undertaken. Is this best delivered locally, in clusters, or nationally? Again the policy examples presented later in the paper provide some examples of different approaches.

Before considering these issues in more detail we consider the background to SME growth policy in more detail in Section 2. In particular we examine some of the contrasts between general SME policy and that targeted at growth-oriented firms. Section 3 then presents a range of international policy models focusing on systemic, holistic and thematic support measures. Section 4 draws out some of the key themes and policy lessons and Section 5 outlines some potential implications for future UK policy.



2. Policy for SME growth⁵

2.1 Introduction

Government – in partnership with other stakeholders – can play a crucial role in shaping the environment in which growing SMEs can flourish, providing appropriate business information, supporting networks and skills development, and ensuring the availability of suitable business finance. Creating an enabling environment and effective support programmes for sustainable growth is not easy, however, and as policy has developed rapidly in recent years, the evaluation evidence from existing policy programmes remains relatively limited.⁶ Central to many support programmes is the provision of business information and knowledge transfer between firms, and between firms and universities/research institutes. Network contacts and relationships with larger firms both nationally and internationally are also often seen as important as SMEs grow and develop. Beyond the start-up phase, managerial and marketing skills allied with adequate financing and effective protection for intellectual property rights is also vital to sustain innovation and growth⁷.

In the remainder of this Section we provide a brief overview of the rationale for support measures for SMEs in general and the more specific rationale for supporting sustained growth.

2.2 Policy for growth

SME growth remains something of an enigma. Numerous studies have been undertaken over the years in an attempt to understand what determines business growth, but attempts to conceptualise and statistically model SME growth remain partial at best. The implication is that the evidence base on which SME policy is based remains partial with a number of contested areas. Some studies have focussed primarily on factors internal to the firm - the background and characteristics of the entrepreneur or owner-manager, the nature of the business itself and the strategies adopted by the firm.⁸ Other studies have focussed more on the



organisational and regulatory context within which the SME is operating, suggesting that firms with similar entrepreneurial resources and characteristics might perform very differently in different national environments.⁹ A firm's location in a supportive entrepreneurial regional innovation system may also be a potential stimulus to entrepreneurship and contribute to innovation and business growth.¹⁰ Social networks too may be an important stimulus for growth, influencing the entrepreneur's ability to take advantage of market opportunities and external resources.¹¹

While some uncertainty remains about the best forms of intervention to support SMEs there are clear arguments about why such intervention may be important.¹² First, it is argued that small firms play a unique role in the economy creating jobs and stimulating market renewal. This suggests that entrepreneurship generates positive externalities, meaning that the 'social' value of entrepreneurship is greater than its 'private' value. Decisions about whether to become an entrepreneur or not, for example, are based only on the private benefits and ignore wider social benefits. This represents a 'market failure' in that individual entrepreneurs are not able to capture all of the benefits of being an entrepreneur - i.e. they are able to capture the private but not the social benefits. Without government intervention to capture the social benefits of entrepreneurship the number of entrepreneurs in the economy will remain too low. Government intervention to reduce the costs or risks of entrepreneurship is therefore justified to raise the level of entrepreneurial activity to that closer to the social optimum.

Similar types of market failures also exist which have been suggested as a justification for government intervention to support SME development. For example, SMEs may find it more difficult to obtain finance than larger firms due to a lack of collateral, their unproven track record and the proportionally greater cost of small transactions. SMEs may also find it more difficult to adopt new technologies than larger firms due to their greater need to use external technologies but their weaker internal technical resources. In each case, the 'market failure' might justify



government intervention to support SME lending, to help small firms adopt new technologies or perhaps provide SMEs with marketing or export information.

These arguments about market failure stem largely from neo-classical economics, which some have argued provides only a weak basis for real world policy making.¹³ Other perspectives, based on evolutionary economics, provide a different type of justification for policy intervention, arguing that government can develop a strategic vision for the economy or a particular sector which individual SMEs cannot. Government may also see other types of strategic priorities such as supporting high tech firms, women's entrepreneurship or entrepreneurship among disadvantaged or ethnic minority groups. In each case, the policy justification is likely to be strategic – or social – rather than depending on some narrowly defined 'market failure'.

Once a decision has been made that a government should intervene to support entrepreneurship or growth, the next question is what type of intervention is appropriate? The first decision to be made is at what 'level' intervention should take place. A useful distinction can be made between four 'levels' of policy intervention:¹⁴

- Macro-economic conditions these set the national context for business development and include issues related to economic stability and growth, national legislative frameworks, social and political stability. Uncertainty about either future growth or policy continuity, for example, may undermine individual's willingness to invest.
- Framework conditions provide the more specific context for entrepreneurship and small business and relate, for example, to resource and factor availability, regulation, legislation and property rights as well as transport, environmental and regulatory systems.



- Mainstream SME support relates to broadly-based policy initiative targeted to support entrepreneurship and small business. This would include measures to support enterprise culture and enterprise education as well as business and advice centres, and grants, loans or guarantees aimed specifically at SMEs. Web-based portals such as Singapore's 'EnterpriseOne' provide this type of mainstream support and an initial point of information and access to government services.¹⁵
- Targeted SME measures relates to narrowly-focussed initiatives intended to support the development of a particular group of entrepreneurs or SMEs. Examples would be support offered to women's enterprise through specialist advice services and business centres while specialist support agencies such as Catalonia's ACC10 provide services to individual firms to support their growth and development.¹⁶

Measures designed to support sustained growth fall into this latter category – targeted measures – and in most countries are seen as complementary to mainstream entrepreneurship and SME growth measures.

2.3 Delivering support for sustained growth

The decision to start any business and, in particular, a firm with a strong growth aspiration requires a combination of opportunity, entrepreneurial and innovative inclinations and capabilities. Perhaps the key starting point developing entrepreneurial inclinations is а business in and entrepreneurship-friendly atmosphere in which business success is seen as positive and there are positive entrepreneurial role models.¹⁷ Creating this type of environment is, of course, a long-term project requiring engagement from a wide range of different organisations including the education system. At best, these initiatives have involved a network of



actors at regional and national level and generated valuable co-ordination and partnering activity.

Alongside such general measures (which can be taken to promote a positive climate for enterprise), specific measures have been adopted in some countries to encourage start-up among different population groups. In Ireland, for example, the Enterprise Start programme has proved effective in encouraging those currently employed to move from employment to business start-up often with high-growth potential.¹⁸ More generally measures designed to promote enterprise awareness and entrepreneurship around universities may be particularly important in stimulating high growth. The University of Waterloo, for example, situated at the heart of Canada's Technology Triangle provides a good example of a university which focuses on supporting start-up businesses. Strongly embedded within the regional community, dense co-operative networks on technology and enterprise between the university and local community are complemented by the university's co-operative education programme. "The rotation of students to industry and back to the classroom solidified already tight relations with local industry. The reflexive relationship has allowed the curriculum to keep up with the ever changing technological frontiers of industry."¹⁹ Over 250 spin-outs from the university have resulted in part from the university policy of allowing ownership of intellectual property to rest with its creator (faculty or student), encouraging both creativity and enterprise.

High-quality business services also provide a key input to growing SMEs particularly in the start-up and expansion phases. Such services may be accessed privately by firms or may provide the mechanism through which publicly funded support services are provided. In general, however, SMEs experiencing or aspiring to rapid growth are likely to require more sophisticated services than most start-up businesses and are more likely to draw on private, and often internationalised, business services. Key areas of importance are likely to be broadly based business development services – dealing for example with legal or regulatory aspects of business



start-up, technology-based services supporting R&D and innovation, and support for internationalisation. Issues around IP may also be important for technology-based firms. For most SMEs the difficulty lies in being able to identify and access the appropriate services quickly and effectively. Public sector agencies can play a key role here in brokering both public and private sector services to SMEs and this is one of the key features of a number of the programmes described later in this paper, particularly the Danish Growth Houses.

Growing SMEs also have greater need and make greater use of external sources of finance than other SMEs, with both debt and equity funding being important.²⁰ Even in situations where loan and equity finance are plentiful and legal structures are well established, however, it is widely recognized that SMEs often have limited access to institutional finance. Four main reasons for this have been suggested:²¹

- Lending to SMEs may carry higher risks than that attached to larger and more established firms. Reflecting the 'liability of newness', small firms generally have higher mortality rates than larger companies and may be more vulnerable to market and economic changes.²²
- Banks and financial institutions may be institutionally biased towards lending to large corporate borrowers. This may reflect prior relationships – joint directorships, track record etc. – or simply a preference for prestige clients.
- Transaction costs are likely to be proportionally higher on the relatively small loans required by smaller firms. This is likely to reduce the profitability of this type of lending and its attractiveness to finance institutions.
- Finally, SMEs seeking loans may be unable or unwilling to provide accounting records or securities or collateral for loans. This may – either unintentionally or intentionally - create informational



asymmetries which make it difficult for lenders to accurately assess lending risk.²³

SME financing issues arise not solely on the supply side, however, with recent research also reflecting demand-side issues both in terms of the reluctance of SMEs to take advantage of external finance and the 'investment readiness' of many SMEs.²⁴ Pecking order models for example, suggest that due to adverse selection firms prefer internal to external finance and, where outside funds are necessary, firms prefer debt to equity due to the lower information and dilution costs associated with debt.²⁵ Even where SMEs do want external finance, questions have been raised about the investment readiness of some firms in terms of the quality of their business planning as well as financial management and governance systems²⁶. The implication is that measures to promote SME finance from the supply-side cannot be considered in isolation. The willingness and readiness of SMEs to access external finance – particularly equity – also needs to be considered.

A range of different mechanisms have been used to support the availability of finance and a number of the schemes reviewed later in this White Paper involve the provision of finance, sometimes alongside other support. Credit, loan or export guarantee schemes, for example, may help meet the potentially higher debt capital requirements of growing SMEs and their need to invest in advanced technologies. Equity investment may also be important, particularly in sectors where rapid growth is anticipated and defensible (typically IP-based) such as in ICT and biotechnology. Experience has shown here that both supply-side and demand-side measures can be effective. On the demand side, measures can be taken to strengthen firms' investment readiness, with a potential role for banks and agencies in helping businesses to assess and develop their business plans and propositions.²⁷ On the supply side, the policy focus has been on equity gaps (or market failures) and trying to ensure adequate financing for SMEs at different stages of development. Here, there is a need to recognise the potential value for SMEs of both informal and formal private



equity funding. Informal private equity funding (primarily through business angels) may be important for firms in the early stages of development; policy can play a role in encouraging angel investment and facilitating angel networks.²⁸

2.4 Support for SME growth – the local dimension

Justifications for local SME support mirror those at national level around either market failures (such as the needs of SMEs not being adequately met by the private sector) or system failures (such as a sub-optimal level of university-SME collaboration). At local level, a fear of displacement from SME growth might be significant, i.e. some firms grow fast but simply by displacing economic activity in other local companies. It is possible to minimise such local effects where firms are exporting outside the local area but to date there have been few robust evaluations of localised SME initiatives.²⁹

A distinction has been made between 'enabling' and 'targeted' local policies for growth SMEs.³⁰ Enabling policies relate primarily to framework conditions and would include education policy and local labour market policy. Education policy is often influenced or shaped locally and can be important in increasing the inflow of ambitious entrepreneurs or contributing to the development of local entrepreneurial and leadership capabilities (Boxes 2.1 and 2.2). Entrepreneurship education at schools and universities may also provide a boost to local growth aspirations, although the evidence base for this type of effect is under-developed. In terms of labour market policy, some elements are determined nationally – social security regimes, for example – but local active initiatives around job seeking or child care may have impacts on local entrepreneurial activity.



Box 2.1: LEAD (Leading Enterprise and Development) Programme,

Lancaster University Management School,

Institute for Entrepreneurship & Enterprise Development³¹

Developed and delivered by the Institute for Entrepreneurship and Enterprise Development – part of Lancaster University's Management School – the LEAD programme ran from October 2004 to March 2006 and was designed to offer a leadership and management development programme, specifically targeting micro-businesses in North-West England. The programme received £861,000 of funding from the Northwest Development Agency through the Alliance and Skills for Productivity initiative, and was delivered through Business Link Lancashire.

A feature of the LEAD programme was its recognition of the crucial role of leadership – specifically that of the owner-manager – in the success of SMEs, and therefore, the success or failure of the regional economy. As a result, the personal and professional development of the individual remained a consistent focus through the duration.

Engaging the management school's experience of the problems and challenges faced by small businesses in the region, the 10-month programme marketed itself as a 'test-bed' for 'innovative combinations of delivery through a truly integrated model of learning'.³² The model provided participants with both taught and informal learning, as well as the opportunity to draw upon a strong peer network which many found to be the most valuable resource offered to them by the programme. Other elements included master classes and tutorials, one-on-one coaching consultancy, action learning and teambuilding days, and peer interaction and mentoring.

Participants were recruited according to their suitability based on a series of criteria. For example, applicants were required to demonstrate a desire to grow; be sole manager or shareholder; be established for over four years and employ between 4 and 20 individuals; and have a clear market



proposition. Furthermore, individuals had to commit themselves to two days a month for ten months. Following a series of interviews, 65 SMEs were selected to take part in the programme on the understanding that nonparticipation would result in a £15,000 forfeit.

No control group evaluation was conducted although the LEAD report, written a year after the programme ended, claimed that the average increase in turnover as a result of the LEAD programme was approximately £200,000 per annum. A fifth of participants claimed to have embarked upon new ventures since finishing the LEAD programme, and a further 80 per cent reporting a significant increase in confidence.

Box 3: Goldman Sachs 10,000 Small Businesses Programme³³

The Goldman Sachs *10,000 Small Businesses* Programme is a targeted support programme for small firms with high growth potential. The programme was launched in 2010. Target businesses have a turnover of typically around £0.3-2.0m. The programme involves the development of a detailed business growth plan, 12 one-day curriculum sessions spread over four months and facilitated peer-group learning. The programme has over 500 alumni to date and is delivered by Leeds, Manchester Metropolitan, Aston, UCL and Saïd Business Schools. The *10,000 Small Businesses* programme runs for four months and is free for businesses with costs covered by the Goldman Sachs Foundation.

Early indications of impact from the UK programme are that participants reported an average increase of 23 per cent of employment relative to when they started and an increase in turnover of 16 per cent. 92 per cent of recipients reported that they are now more confident in growing their business.



Other targeted local policies for growth SMEs would include incubators and cluster formulation, and examples of both types of policy are included in the policy models included later in this White Paper. Incubation first emerged in the US in the mid-1980s to support start-up development and tackle problems associated with lack of capital, poor management and insufficient market understanding. In general terms, business incubators provide support for high-growth ventures during their early years when they are most vulnerable. Typically "the role of business incubators is to provide a supportive environment, where new entrepreneurs receive training and assistance in business management and marketing, various other business services, and access to seed capital."34 It has been suggested that incubators add value to their tenants in four areas: diagnosing business needs, selecting and monitoring their tenants, providing access to business networks, and providing of access to capital. It has also been suggested that incubators may enhance the entrepreneurial culture of an area and act as a magnet for highly skilled individuals looking to benefit from the services provided by the incubator.³⁵

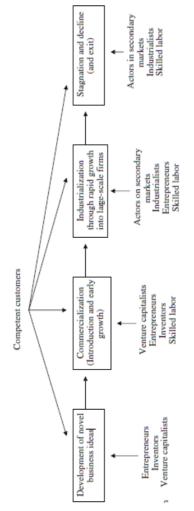
Two key success factors emerge from the incubator literature. First, the context in which the incubator is located is a very significant influence on its success. In the Israeli case, for example, research has shown that incubator success rates increase sharply where they are closely related to venture capital provision.³⁶ The example of Oxford Innovation in the UK highlights a similar point emphasising the importance of business incubation and support alongside the provision of appropriate capital. The implication is that incubators can form a valuable part of a systematic approach to supporting SME growth and development but are unlikely to succeed in isolation. Second, the evidence suggests that the management and operation of the incubator itself can also be a significant determinant of its success with different forms of incubation service of value to different types of company.³⁷

Incubators can also play an important role in assisting with cluster formation and development, with entrepreneurial activity crucial at the early



stage of cluster formulation. Key ideas here are reflected in the 'competence bloc' approach which recognises both the internal and external enablers of SME growth and distinguishes four stages in business development: idea development, commercialisation, rapid growth and stagnation³⁸. In this view, the role of local government and support agencies is to enable the process of development, supporting the engagement of different actors as the business develops. Figure 2.1 summarises the process of business development and the main (local) actors involved in any phase of development.

Figure 2.1: Local actors involved during the business development process



Source: Adapted from Henrekson et al. (2010), Figure 1, p. 279.

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3. Models of support for sustained growth

3.1 Introduction

Although there is widespread international concern with policy for fast or high growth businesses, there is little commonality to the policy approaches being adopted. In this section we outline a range of different policy models from across the OECD. Profiles of each scheme draw on longer and more detailed accounts published originally in a report from the OECD-LEED Programme (2012) 'An international benchmark analysis of public programmes for high-growth firms', Paris. The authorship of each of the original scheme profiles is acknowledged at the beginning of each scheme profile.

Three main approaches can be identified in the schemes reviewed:

- Systemic measures focus on informational or strategic market failures and aim to remedy perceived weaknesses or blockages in innovation or entrepreneurship systems. The Danish Growth Houses provide diagnosis and action planning services to SMEs to help firms overcome informational barriers to accessing external support. The US Jobs Accelerator adopts a more interventionist approach providing a range of business supports to overcome strategic deficits and assist with cluster development.³⁹
- Holistic approaches
 – these schemes are either place-based such as the Swedish National Incubator Programme and Ontario MaRS or based on a long-term and intensive relationship between support scheme staff and the SMEs in schemes such as the Companies of Scale scheme and the Dutch Growth Accelerator. One key advantage of this type of approach is the intimate knowledge which the support provider has of the SME and its support needs. Perhaps the other key advantage is the opportunity to build trust between the enterprise and support staff, something which is crucial to firms' willingness to accept advice. Interestingly, the evidence suggests



that while trust is important in the provision of business advice and support this effect is strongest where a contractual relationship also exists between the firm and the advisor.⁴⁰ This is perhaps most strongly exemplified in the Dutch Growth Accelerator.

Functional or thematic approaches - a number of SME support measures focus on financial support either through grants or equity the German High-Tech Gründerfonds (HTGF) (e.g. and Commercialisation Australia). Other measures focus on management and leadership development such as the Irish Management for Growth programme and the UK's Growth Accelerator. Approaches differ here too however, with the Irish scheme seeking to develop a broadly-based set of managerial competencies while in the UK Growth Accelerator firms can access help with business development and strategy execution, access to finance, commercialising innovation or leadership development.

Section 4 draws out some common themes. Each of the measures we discuss fits, of course, within a national range of macro-economic policies, general measures designed to support SME growth and other targeted initiatives. Nonetheless each measure suggests potentially transferrable policy lessons for the UK.

3.2 Systemic Approaches

3.2.1 Danish Growth Houses⁴¹

The five Danish Growth Houses (GHs) were established in 2007 and are organized as independent, commercial, non-profit foundations. The aim of the GHs is to sustain and support the growth potential of start-ups and growth businesses. The GH programme targets 'new and small businesses with growth ambitions and growth potential'⁴², independent of age, sector, business ownership, and market orientation etc. The GH initiative was created to address a market failure of insufficient supply and demand in the



consulting market.⁴³ Around half of the client companies of the GHs are micro firms.

The GH service is designed like a house with three floors. The ground floor of the house builds the foundation of how 'the GHs assist enterprises in mapping their growth potential, make a growth plan and refer enterprises to public or private business service that can help firms to realize their growth potential'.⁴⁴ The first floor of the house emphasises the GHs as 'the main hub in an integrated system of services where the GHs generate collaboration between actors and are the 'drivers' of ... a growth culture as well as growth on the part of the enterprises'.⁴⁵ The purpose of the GHs is, in this respect, to guide companies in the right direction and thereby decrease information asymmetries and search costs, while reducing the potential market failure of insufficient supply and demand in the consulting market.⁴⁶ The top floor of the GH indicates that the GHs can be operators on various regional projects that create growth possibilities for businesses, for instance, projects financed by municipalities, regions, the state or EU.⁴⁷

Enterprise selection is based on the advisors' view of whether an individual enterprise, over a period of one year, will be able to increase employment at least 10%, its turnover at least 15% and its exports at least 10% in comparison to control groups of similar characteristics.⁴⁸ Enterprises with high growth potential are subjected to a business diagnosis based on which a tailored growth plan is developed. Subsequent to the diagnosis programme advisors refer enterprises to the most appropriate businesss service based on the business diagnosis and the growth plan.

Annual evaluation of the GHs is undertaken using a control group approach. Results have generally been very positive. A 2013 value for money evaluation suggested a net present value of 2.6 over two years⁴⁹.

3.2.2 The U.S. Jobs and Innovation Accelerator Challenge⁵⁰

In May 2011, as part of its regional cluster initiative, the Obama Administration launched the Jobs and Innovation Accelerator Challenge



(Jobs Accelerator). The program provides a mix of funding and technical expertise to regional partnerships that identify existing industrial strengths upon which to build. The stated objectives of the Jobs Accelerator program are to: (1) create jobs; (2) expand economic activity; and, (3) enhance the global competitiveness of U.S. manufacturers.⁵¹ In September 2011, \$37 million was awarded to projects in 21 states, covering industrial activities ranging from bioscience to interactive media. A further \$26m was awarded through the Advanced Manufacturing Jobs Accelerator program in 2012. The Jobs Accelerator program consists of simultaneous investments by five agencies in each chosen high-growth cluster covering cluster development, standards development, R&D assistance and demonstration project efforts and training. These funds generally support project durations of three years.

Two major market failures motivate the Jobs Accelerator. First, it is argued that gaps have emerged in the national innovation system that the market alone has been unable to bridge particularly in commercialisation processes. Second, it is observed that much advanced manufacturing activity is occurring in localized industrial clusters, in which small- and medium-sized enterprises (SMEs) interact with large firms, academia, training institutions that produce appropriately trained workers, as well as other organizations. Collectively, these represent "industrial commons" in which firms can compete, collaborate, share ideas, and ultimately enhance each other's productivity.⁵² Since individual firms cannot reap the full benefits of this complex clustering of organizations of various kinds, it's strengthening and enabling presents a collective action problem to which government can respond as a co-investor and convener.

Applications are accepted from regional partnerships that focus on advanced manufacturing, as defined above. Targeted clusters are those with the opportunity to produce goods and technologies that can compete in the global marketplace. Partnerships are evaluated and selected on the basis of key criteria which include the careful identification of the regional economic ecosystem and cluster, including major organizations and their



roles; a project concept that integrates the investments of each agency in a complementary manner; detailed agency-specific scopes of work including costs; clear definitions of project impact and measurable outcomes; and an analysis of the sustainability of the project outcomes over the long run.

Because the Jobs Accelerator program is relatively new, and projects typically span three years, there is currently no evaluation of programme impacts.

3.3 Holistic Approaches

3.3.1 Sweden's national incubator program⁵³

A number of incubator programmes have operated in Sweden in response to a perceived weakness in the number of academic spin-offs. Sweden's first national incubator programme was initiated in 2003. This was named the National Incubator Programme (NIP), and run by VINNOVA, the Swedish Governmental Agency for Innovation Systems. Based on experiences in NIP a second national incubator programme – IBIP, Innovationsbrons Incubator Programme – was launched in 2008. This was replaced by the third programme BIG (Business Incubation for Growth) in the autumn of 2011.

The number of incubators with financial support increased from 14 in the NIP programme (2003) to 21 in the IBIP programme (2010) and 24 in the BIG programme (2012). In BIG the annual budget is approx. 60 MSEK. In total the BIG incubation program includes 46 incubators, but only 24 of these have been granted performance-based funding. The remaining 22 participate in meetings and educational activities. Besides supporting the incubators themselves, the Innovationsbron also offers seed financing for ventures in the incubators.

All three national incubator programs have targeted the best performing Swedish incubators and offers them performance-based funding. Thus, the number of high-performing incubators has increased from 14 to 24 during



the ten years. To obtain performance-based funding the incubator must also have co-financing (at least 50%). The financed incubators are supposed to deliver top-class business coaching to prospective growth companies. The majority of incubators with national funding are either focusing on technology businesses (36.8% of the incubators) or medical/life science firms (21.1% of the incubators). In general, the highperforming Swedish incubators use a "picking-the-winners" selection strategy accepting around one-sixth of applications. Most often there is a rigorous evaluation process with multiple criteria and a high reject rate (over 80% in many cases).

There is huge variation in the services offered to client firms. At the lower end of the scale there are incubators with minor interventions that are initiated by the entrepreneurs. At the other end are a few incubators acting as venture capital investors (including ownership of the firm and active participation in the management of the firm). In between these extremes the majority of the incubators have a support system in terms of a structured step-wise programme, which incubatees are obligated to follow. Typical areas covered are financing issues, business support, marketing assistance, networking and coaching. A few incubators also offer help with human resources and internationalization.

3.3.2 Ontario's Medical and Related Science Discovery District (MaRS)⁵⁴

MaRS was founded to build the commercialization capacity of the province of Ontario. MaRS has three strategic goals: (a) to build great companies; (b) to develop a vibrant innovation hub; and (c) to strengthen Canada's global innovation brand. Established in 2005, MaRS is located in Toronto, Ontario, which is the largest centre of science and engineering research in Canada. MaRS is now active in five areas: (a) advanced materials and engineering; (b) cleantech; (c) information technology, communications and entertainment; (d) life sciences and health care; and (e) social innovation. MaRS was initially an acronym for "Medical and Related



Sciences," but when the organisation's mandate expanded, the acronym became its full name.

MaRS is constituted as a not-for-profit corporation and is funded by the municipal, provincial and federal governments, high net worth individuals and private foundations, non-profit organisations such as universities and hospitals, and private sector organisations such as banks, law firms, pharmaceutical companies, telecommunications providers, and IT companies.

MaRS is located in a renovated 750,000 square foot heritage building, where roughly 2,300 people currently work. Space in the building can be rented, and includes a mix of laboratories, office space and events space. Construction has begun on a MaRS Centre Phase 2, which is scheduled to be completed in September 2013. The new 20-storey building will provide an additional 780,000 square feet, 60% of which is designed as lab space and 40% as office space. MaRS clients are early-stage organisations in one of its five focus areas. MaRS provides advisory services, the JOLT technology acceleration service for high growth potential web and mobile companies, and the Investment Accelerator Fund (IAF) which invests up to \$500,000 in companies that have the potential to be global leaders and provide sustained economic benefits to the province of Ontario.

While some financial monitoring data is available for MaRS there has been limited quantitative evaluation of its impacts. Even were these to be available, they may underestimate the benefits of the organisation as one of the strategic objectives of MaRS is to create a vibrant innovation hub and its physical space is an asset in this regard. It is a well-used venue for innovation-related events, some run by MaRS, such as the upcoming twoday Social Finance Forum, and some run by other entities, such as the Canadian Innovation Exchange (CIX).



3.3.3 The Dutch Growth Accelerator⁵⁵

The Dutch Growth Accelerator programme was introduced in 2008. Following a national competition a delivery contract was awarded to the High Growth Stars Consortium, a group of five parties including PwC (finance and organization), De Baak Management Centre (personal development), AKD (law), Philips Innovation Services (lean management) and Port4Growth (platform for fast growing companies). The first companies started participating in the programme in 2009. The total public investment in the programme for the five-year programme is five million Euros used primarily for programme development.⁵⁶ Beneficiary firms contribute a fixed amount of 75 thousand Euros to take part in the 5-year programme. After the first five-year-period, the programme will be selfsustainable and be directly funded via beneficiary firms' contributions.

The objectives of the Growth Accelerator Programme over the 2009-2014 period are: (a) to support and facilitate the growth of two hundred SMEs from a turnover of approximately two million Euros to a turnover of twenty million Euros in a period of five years; and (b) to ensure that each company has a Strategic Picture, a Growth Strategy and Growth Path, including milestones, and a Personal Development Plan.

Firms are very carefully selected for the programme on the basis of past growth, ambition and willingness to commit to the five year duration of the programme. A new group of participants (15-20 companies) starts once or twice a year. The average firm participating in the programme is five to ten years old at the beginning of the programme, has fifteen employees, and has turnover of around €3.6m in a fast-growing sector such as IT, Services, High-tech industry, and Healthcare. It has a highly ambitious Director-Manager of approximately 40 years old on average who has full ownership of the company.

The Growth Accelerator programme is based on the idea that there are no better advisors for fast growing companies than colleague entrepreneurs who have been or are going through the fast growth process themselves.⁵⁷



Thus, companies are supported by their colleagues, and in addition to this, by experienced professionals from the consortium partners on a number of growth related topics. Another characteristic of the programme is that it is not only centred on business development, but also on personal development of the companies' Director-Managers.

The Growth Accelerator programme consists of four phases: Year 1 is devoted to the development of a strategic picture for the growth of the firm and a personal picture for the development of the CEO. Based on the outcomes of year one, the firm is prepared for growth via six different knowledge modules per year (in years 2 and 3) associated with the chosen focus. This is accompanied by mentoring, peer group learning sessions and leadership master-classes. Year 4 is marked by some re-assessment of the firm's growth strategy and the completion of other modules. Year 5 follows an essentially similar pattern.

In 2011, results of the participating companies were compared to a control group based on a number of performance indicators.⁵⁸ Programme participants' performance was better than the performance of companies in the control group. Firms that started the programme in 2009 had a 22 per cent higher gross turnover increase than firms in the control group. Other results showed an eight per cent average employee increase and a 55 per cent higher foreign sales increase.

3.3.4 Scotland's 'Companies of Scale' programme⁵⁹

Originally launched in 2005 as a pilot programme the Companies of Scale (CofS) programme provides bespoke, specialist support, targeted at Scottish companies whose current turnover exceeds £10m and who have ambitions to become £100m plus businesses. The CofS programme is wholly operated and managed by Scottish Enterprise and draws on the resources within Scottish Enterprise for support in areas such as support for innovation, internationalisation and organisational development.



To be eligible for participation in the CofS programme companies must demonstrate considerable growth ambition. The main focus of the programme is to provide an intensive form of "account management"⁶⁰ support, which provides a strategic challenge to the firm's top management team to help the business upscale and achieve further rapid growth.

The CofS programme is designed to work with a small number of (currently 16) successful businesses to help accelerate their existing growth performance through transitional growth "triggers".⁶¹ These growth triggers can be things like ownership changes (e.g. management buy-outs etc.), new product development or the entry into a new market. A common feature of the programme's support is to help grow these businesses internationally (as well as domestically). At present, the majority of the businesses participating on the programme are technology-based businesses, particularly software companies, which focus on business-to-business customers. There are also a large number of energy-related firms on the programme, given Scotland's growing Oil & Gas sector.

The CofS programme does not have a "fixed" offering, instead participating firms work with Scottish Enterprise to identify bespoke packages of support. Before embarking on the CofS programme, each participating firm is required to undergo a comprehensive strategic review conducted by CofS staff. This review covers all aspects of the firm and its performance, with a focus on company leadership, firm strategy and organisational structure. The CofS programme's strength lies in its flexibility and ability to provide holistic business development and growth. Business support falls into three main areas: leadership, strategy and structure. The CofS programme also actively facilitates peer-to-peer networking between CofS companies and other high growth businesses in Scotland, through events (e.g. "CEO Forums" and the "CofS Conference"), personal contacts and participation in the GlobalScot⁶² programme.

Evaluation of the pilot phase of the CofS programme (2005-07) yielded positive results although there has yet to be a full economic impact



evaluation. An independent interim review conducted in 2011, however, found that the firms that took part in the review were very positive about the nature of the programme and the support they had received. Many of the companies mentioned the fact that participation on the programme requires a high level of commitment on the company's behalf but this is worth it for the perceived value the firm's obtain from the programme.

3.4 Thematic measures

3.4.1 Germany's high-tech grunderfonds⁶³

The High-Tech Gründerfonds (HTGF) was introduced in 2005 with the aim of financing young technology or innovation-oriented companies that face serious risks because of their early phase of development. By concentrating on a relatively small number of promising business concepts and ventures – compared to the overall number of firms in Germany - HTGF pursues a strategy of "picking winners". The HTGF is a public-private partnership with the German Ministry of Economics and Technology as the main investor or stakeholder, followed by the KfW, and several private German companies. From 2005 to 2011, €272 million were invested (Gründerfonds I), the second phase started in October 2011 (Gründerfonds II) with funds of €288.5 million.

Programme design is based on the assumption that there is a market failure in the seed phase of high-technology companies in Germany which results in an investment gap as profit-oriented VC companies or informal investors like business angels tend to shy away from taking technology and market risks in this particular phase. This is why the programme has been designed as a public-private partnership with important companies as stakeholders, which guarantees market conformity at the same time. Concrete investment objectives have been formulated: 40-50 seed investments per year are planned, which is equivalent to $\leq 16-22.5$ million. No quantitative specifications have been set concerning the return on investment.



The High-Tech Gründerfonds focuses on young, technology-oriented companies which carry out one or more R&D projects. As a rule, the companies are younger than 12 months (with operating activities) and have already been formally founded. There are some exceptions where the companies have not yet been founded but a business plan (and a concrete business idea) already exists. Regardless of the formal establishment of the company, the financing period is less than 18 months. The HTGF invests seed capital solely in limited liability companies (predominantly GmbH). Liability is therefore limited to the company's assets and the founders do not have to provide security. HTGF also offers firms the potential for coaching and mentoring with an approved list of business coaches. This is not a condition of funding, however.

The selection process is crucial for the programme's success and a transparent four-step process has been developed prior to the investment decision. A central element in this selection process is the business plan, which serves as the main document for further decisions. Once the business plan or draft concept has been positively evaluated, the HTGF offers the company a "Term Sheet" outlining the investment terms. Due diligence is undertaken once the term sheet has been signed. The company's concept is analysed in detail in this phase. A key constituent of the decision-making process is a presentation by the start-up team to the investment committee.

The HTGF has been successful in terms of the amount of start-up investments, the high growth of the companies supported and the VC market as a whole. By investing in young and technology-oriented companies, the HTGF has significantly stimulated the German market for seed investments. In the period 2007-2011 the HTGF had always a share of the total seed-investments in Germany between 30-40%. "Crowding-Out" effects caused by the HTGF are not evident. Experts consider the programme as a guarantor for financing interesting start-ups independent



of economic cycles, which is particularly important in periods of recession due to the pro-cyclical tendencies of the VC market.

3.4.2 Commercialisation Australia⁶⁴

In October 2009 the Australian Government announced Commercialisation Australia, including its funding profile of \$278 million for the five years to June 2014 and on-going funding of \$82 million per year thereafter. The program opened to applications in January 2010. Commercialisation Australia aims to build the capacity of, and opportunities for, Australia's researchers, entrepreneurs and innovative firms to convert ideas into successful commercial ventures, enhancing Australia's participation and competitiveness in the global economy and generating commercial returns from Australia's significant investment in public sector research.

Commercialisation Australia offers funding for commercialisation projects through four different components, which can be accessed by applicants in the order and combination that suits their needs. Support is provided through four grant components, tailored to the growth and commercialisation needs of individual applicants: Skills and Knowledge (S&K) grants of up to \$50,000 for expert advice and services; Experience Executives (EE) grants up to \$350,000 over two years to engage an experienced CEO or other executive; Proof of Concept (POC) grants from \$50,000-\$250,000 to assist with testing the commercial viability of a new product, process or service; and, Early Stage Commercialisation (ESC) grants of \$50,000 to \$2 million to assist with taking a new product, process or service to market. Commercialisation Australia employs highly experienced business builders and entrepreneurs as Case Managers, who assist program applicants in identifying the most appropriate support strategy.

Applicants must demonstrate a clear and convincing market opportunity, value proposition and execution plan in order to be competitive against other applicants. Most program participants are small, privately owned companies limited by shares. On average, they have 4.5 employees.



Applicants for an S&K, POC or EE grant must have annual turnover of less than \$10 million, and must aim to commercialise a new, clearly identified product, process or service. Main sectors covered are ICT and biotechnology although there are no restrictions. Applicants must also contribute at least 50% of the funding required to complete their commercialisation project (with the exception of Skills and Knowledge applicants, who only need to contribute 20%).

Of the 300 participants to the end August 2012, 69 have completed their Commercialisation Australia project. Most of these (50) were satisfied with project outcomes and have either entered the market, or are progressing towards entering the market, with their new product, process or service. Only four projects failed and will not proceed, while 16 were at least partially successful and commercialisation may still occur but additional work will be required.

Commercialisation Australia underwent an interim evaluation in 2010. The Interim Evaluation found that stakeholders are highly satisfied with the program. The type and level of assistance provided by Commercialisation Australia is considered appropriate and there is high demand for each individual program component. The program is reaching its target market of small innovative start-up companies; however uptake from the university and research sector has been slower than anticipated.

3.4.3 England's Growth Accelerator⁶⁵

Launched in May 2012 the Growth Accelerator scheme provides structured coaching for SMEs' leadership teams. Delivery of the Growth Accelerator programme was the subject of an open tender and is delivered across England by four main private sector partners (Grant Thornton, Pera, Oxford Innovation and Winning Pitch) working with a range of specialist local partners⁶⁶. The scheme aims to assist 26,000 firms over a three-year period, with public investment in the scheme approaching €250m (£200m).



The Growth Accelerator Programme relates only to England, other arrangements for supporting high-growth firms exist in other parts of the UK.

To be eligible for the programme firms must either be: SMEs with 10 or more employees with the potential to increase turnover or employment by an average rate of 20% over three years; SMEs with fewer than 10 employees that over three years have the potential to increase employment by at least 7 employees or annual turnover by £0.75m; or start-ups with potential to achieve turnover of at least £1m within three years of starting trading, or to have at least 10 employees within three years. Firms may be from any sector.

The scheme uses a structured approach – and proprietary assessment tools - to assess firms prior to accessing the programme and being allocated a business coach. The scheme provides an average of 7 days coaching over a 12-18 month period, and firms are expected to pay a contribution to the cost of coaching. However, both the costs to the firm and the actual number of days coaching each firm receives varies with firm size. Micro firms with up to 9 employees pay £600, small firms with 10-49 employees pay £1,500 and larger firms with 50-249 employees pay £3,000. By contrast, on the basis of the scheme budget and anticipated take-up, the average public investment in the programme (per intervention) is expected to be around £7,500⁶⁷. The network of 800 Growth Accelerator business coaches across the country is employed on a freelance basis to work with participating companies.

Development activities are focussed on four main themes:

 Commercialising innovation – helping SMEs to identify new opportunities for innovation, providing support for commercialising and obtaining finance for innovation;



- Business planning help SMEs to create and implement a high growth strategy with coaching support, tailored training and facilitating network access;
- Access to Finance help SMEs to improve their investment readiness and ability to attract growth finance;
- Developing leadership skills through coaching help SME leaders to develop their management skills. Funding of up to £2000 is available (on a matched basis) for specific training needs.

It is too early in the life of the Growth Accelerator programme to have any evidence of impact or effectiveness although illustrative company success stories have been publicised (www.growthaccelerator.com). Ex ante assessments of the likely impact of the programme, however, suggest that it might create 55,000 jobs (an average of 2.1 jobs per planned intervention) and generate £2.2bn in terms of additional gross value added.

3.4.4 Ireland's Management 4 Growth Programme⁶⁸

The Management 4 Growth Programme was initiated by Enterprise Ireland which is the government organisation responsible for the development and growth of Irish enterprises in world markets. The aim of the programme is to develop a cohort of world-class, highly competent and confident management teams who can, through the development of the productivity, innovation and competitiveness of their firms, grow their businesses internationally. The ultimate ambition of the programme is that it will support participating SME management teams to further develop their strategy, operations and people management practices to drive sales and export growth.

The programme is open to the management teams of SME client companies of Enterprise Ireland that are classified by Enterprise Ireland as 'established' and are seen as having export growth potential. Firms can come from any industry sector, with particular attention being given to



companies in the Food, Services, Software, Life Sciences, Clean Tech, Electronics, Construction and Consumer industries. The maximum participation per company is limited to three individuals (CEO plus 2 senior managers).

The Management 4 Growth Programme comprises: Executive education learning modules specifically geared towards companies ready to make a more significant footprint in international markets; (b) Appointment of a business advisor/coach working directly with each participating management team to apply the tools and techniques to their own business challenges; and, (c) Peer networks established to support participants and encourage peer to peer learning. There is also signposting to other Enterprise Ireland services and management development supports.

The Management 4 Growth Programme is delivered in partnership with Dublin City University and the Irish Management Institute, with independent end-to-end evaluation facilitated by the University of Limerick. International experts from a range of academic and training institutions (from Ireland and abroad) contribute to the programme which is subsidised by Enterprise Ireland. If three staff from one business are attending, the programme cost is around €27,000 with the company contributing €12,000. No formal evaluation of the programme has been undertaken to date.



4. Policy for fast growth – cross-cutting themes

4.1 Introduction

The policy models outlined in the previous section clearly provide a range of different types of support for sustained growth. A number of cross-cutting themes emerge, however, which suggest learning points for the development of new fast support measures and the development of existing measures. We discuss these below in five sections dealing with:

- Firm selection;
- Timing of support;
- Business and leadership development;
- Peer group or shared learning; and
- Evaluation.

Before considering these themes, however, it is worth noting one other feature common to most of the schemes – and central to some initiatives such as the Danish Growth Houses – business diagnosis and action planning. The rather limited evidence here suggests that such business planning activities are positively linked to subsequent growth and survival but that these effects are strongly conditional on the characteristics of the firm.⁶⁹ This too provides a potential learning point for new or revised measures.

4.2 Firm selection

A major issue for each fast-growth scheme is the selection of businesses to receive what is often an expensive intervention with restricted scope. A number of alternative approaches were discussed in previous sections each of which has consequences for the subsequent impacts of the scheme. Targeting support on 'better' firms, for example, may help to maximise impact but may also make the evaluation of scheme outcomes



more difficult. Targeting may also influence crowding out or displacement as subsidised businesses increase their competitiveness at the expense of other businesses⁷⁰. Rules such as a focus on exporting firms can, however, help to minimise such effects as in Commercialisation Australia.

In each of the policy models considered here, firm selection does involve the issue of 'picking winners' and is almost always based on a combination of quantitative performance assessment and a more subjective assessment of growth ambition. In the five year long Dutch Growth Accelerator programme, for example, where the scheme requires considerable time commitment from the firm and a willingness to engage in peer-learning, selection involves a number of questions designed to assess eligibility and suitability:⁷¹

- What were the turnover results from the past two years?
- Does the company have a healthy balance sheet?
- How is the business performing?
- Does the company/Director-Manager have growth ambitions?
- To which extent is the company/Director-Manager prepared to participate in peer-review?
- What is the growth potential of their core business?

No 'hard criteria' are used to measure either growth ambition or the growth potential of the business. Instead, these are assessed by a selection committee on the basis of a presentation from potential participants and data on average performance in the sector in which the firm is operating. The assessment is therefore based on a combination of the financial health and prospects of the business as well as the Director-Manager's motivation and determination. In the Dutch scheme the requirement that participants make a contribution of \notin 75,000 also secures their long-term commitment.



An essentially similar approach is adopted in the Scottish Companies of Scale scheme where participation hinges primarily on a subjective assessment of the growth potential of each business, the likelihood that the business will be able to achieve their specified growth targets, and their willingness to engage in the programme and closely interact with other companies on the programme.⁷²

Other measures which depend less on peer-group learning place less emphasis on the commitment of firms to the programme. Commercialisation Australia, for example, assigns each applicant a Case Manager who guides the applicant through the application process and prepares final papers for the Commercialisation Australia assessment board. Baseline conditions are that firms must meet eligibility criteria (size and legal status) and also be able to provide evidence that they have access to the matched funding (generally 50 per cent of the project cost) required by the scheme. If these criteria are satisfied applicants are assessed against the 'Merit Criteria' which are used to prioritise applications. These are:

- Need for funding applicants must demonstrate that they do not have sufficient funding to complete the project and that there is little likelihood that funding would be available from other sources;
- Market opportunity the size and scale of the market opportunity needs to be clearly defined;
- Value proposition a compelling proposition needs to be outlined focussing on why a customer would want the new product or service;
- Execution plan applicants are required to outline a clear execution plan with a defined path to;
- Management capability applicants must demonstrate an appropriate level of managerial expertise;



 National benefits – projects must offer significant public benefits and positive externalities to the wider community. This may relate to potential exports or spill-over benefits in terms of the diffusion of knowledge skills, diffusion of new products or services or increased collaboration between businesses and/or businesses and research institutions.

The latter of these 'Merit Criteria' is particularly interesting – and surprisingly uncommon among the schemes considered here⁷³. The emphasis here is on the social or societal rather than private or scheme benefits of any project, relating directly to the justifications for public intervention discussed earlier. Particularly in terms of technology focussed programmes, such as Commercialisation Australia, these positive externalities or spill-overs have been shown to be significant.⁷⁴ The benefits of increased connectivity between firms and between firms and universities may also have significant national benefits.⁷⁵

Leading practice in terms of selection for fast growth schemes therefore remains a combination of quantitative metrics and subjective assessment of growth potential and ambition. Including merit criteria along the lines of those of the 'National Benefit' criterion used in the Commercialisation Australia scheme seems an obvious extension to this approach. Ex ante approaches to this type of national benefits or spill-overs are themselves, however, inevitably subject to considerable uncertainty⁷⁶.

4.3 Timing of support

The point at which a firm receives support can be crucial to its growth trajectory and the receptiveness of management to outside help. Most of the programmes have eligibility criteria which in some sense constrain the timing of support often in the form of turnover or employment guidelines. In the LEAD programme, for example, participants had to have been established for over four years and employ between 4 and 20 individuals, while the Goldman Sachs *10,000 Small Businesses* programme has no eligibility criteria in terms of time established but targets businesses with a



turnover of typically around £0.2-1.0m. Other schemes are inevitably focussed on a particular stage of development given their orientation. The German HTGF scheme for example provides equity funding and related advisory support for start-up companies and therefore limits support to firms which have been operating for 12 months or less at the time of application.⁷⁷ The Swedish National Incubators Programme also focuses on very early stage businesses with an emphasis on technology and medical/life sciences firms.

One particularly interesting approach is that operated in the Scottish Companies of Scale programme based on the notion of 'tipping points' or 'trigger points' which may instigate a period of rapid growth or threaten sustained growth.⁷⁸ Tipping points, for example, have been defined as 'binary occasions that challenge the extant operational strategic orientation of an organisation invoking a re-evaluation and reappraisal where the option is to stay the same or fundamentally change'.⁷⁹ Similar discussion of 'critical junctures' has suggested that these might "characterise the transitions between different phases of development". ⁸⁰ Trigger points might include:

'... the acquisition of a company by a new owner, changes in ownership of a company via management buy-outs (MBOs) or management buy-ins (MBIs), new product development or entry into a new geographical or product market. These trigger points appear to occur between phases of a company's development, denoting that they are, in fact, precursors to changes in growth rate... While some trigger points may arise from chance events (e.g. regulatory change), others will be deliberately planned and opportunistically executed by the firm (e.g. entry into a new joint venture). A key point to make is that, while offering firms a valuable opportunity to grow (and sometimes upscale), these trigger points might also cause firms added difficulties in terms of their abilities to manage or absorb growth'.



Thus tipping points may be exogenous to the firm, internally initiated or endogenous, or co-determined as Table 4.1 suggests. Either way tipping points offer a potential stimulus for business change and transition, both of which may benefit from external support and advice. In the Scottish Companies of Scale scheme such tipping points have often been the entry point for firms to the scheme either in order to deal with product failures or take advantage of strategic or product growth opportunities.⁸¹

Notions of tipping points or trigger points may therefore provide an alternative type of selection criterion for SME support to the more traditional vintage or scale criteria. Issues then arise of course about how to identify which firms are experiencing tipping points and whether these are likely to have the potential for significant growth.

Endogenous	Exogenous	Co-Determined
New product/service offering	Technological development	Entry into a joint venture
Change in company ownership (e.g. MBO, MBI, employee-share ownership etc.)	Government regulatory issues	Acquisition by another firm
Acquisition of another firm	Macroeconomic changes	Major new capital investment
Change in management or Board personnel	Changes to public policy	Adoption (or adaptation) of new business models
Development of a new production process	Access to public sector assistance (e.g. R&D or capital expenditure grants)	Injection of risk capital or new bank funding
Implementation of new management systems	Product failure in the marketplace	Receipt of a major contract or obtaining a new customer

Table 4.1: Classification of growth trigger points

Source: Brown, R and Mawson, S (2013) "Trigger Points and High Growth Firms: A Conceptualisation and Review of Public Policy Implications', *Journal of Small Business and Enterprise Development*, Table 1.





4.4 Business and leadership development⁸²

Effective leadership is crucial to the success of any business and it might be argued that because of their dynamic nature, effective and flexible leadership is more important in SMEs than the majority of firms. It is clear for example, that the traits and behaviours that predict entrepreneurial success may change over the life cycle of the firm. Extraversion, for example, may matter more in the expansion phase than in the start-up phase, because this stage involves motivating sub-ordinates to work hard to effect organisational growth. Similar differences might be observed for supervisory leadership and strategic leadership.

The implication is that growing SMEs may require different forms of leadership, and, by implication, different forms of leadership support relative to firms with stable sales or employment. In addition, growing firms may need to adjust leadership styles and behaviours in different life cycle stages, as their organisational conditions and challenges evolve rapidly. Fast growth ventures, for example, tend to go through a succession of management changes as they grow, so a key challenge is in ensuring that the right skills are in place when required. The discussion above suggests that policy measures designed to support leadership development will need to adapt to the changing needs of the venture as it grows.

Measures such as the LEAD programme outlined earlier clearly have a specific focus on developing leadership competencies (Box 2.1). Leadership development - alongside the development of the business itself - is also a key part of some of the other schemes reviewed here. In the Companies of Scale Programme, for example, leadership development is achieved through executive coaching, targeted input from international experts, networking and company visits. An essentially similar approach is adopted in the Irish Management for Growth programme with the programme typically involving two or three members of the senior management team of a business. This facilitates both individual learning and discussion between team members about how learning can be applied



to the individual firm. Perhaps the most explicit personal development objectives, however, are found in the Dutch Growth Accelerator scheme where the personal development of the business leader is seen as equally important as the development of broader business capabilities. This process starts with the development of a 'Personal Picture' – alongside a 'Strategic Picture' for the business itself - which represents where the entrepreneur sees himself or herself in five years. Throughout the programme this Personal Picture is then updated and developed as part of the peer-learning process.

To date, there have been few, if any, evaluations of the effectiveness of different policy interventions in terms of their ability to contribute to leadership development in growth businesses. Indeed, distinguishing the effect of leadership development from, for example, the resource mobilisation effect in any given support initiative would probably be impossible. One recent paper based on a review of a number of leadership development schemes suggests the following 'tentative recommendations', however⁸³:

- Selectiveness developing leadership capabilities is resource consuming and takes a sustained effort so attention should be focussed on those ventures that have the most potential to achieve rapid growth.
- Hands-on approach the evidence suggests that initiatives with the strongest engagement with businesses achieve the broadest leadership development impact.
- Participation in upside returns as well as downside risk. Given that leadership development takes sustained effort, it is important to ensure long-lasting, committed partnership between high-potential new ventures and their stakeholders.
- From picking the winners to retaining winners multi-stage selection processes may help to solve the 'Picking the Winners' problem and ensure that support efforts are targeted at the right recipients.



- Combination of skills transfer and skills development developing internal capabilities takes time, so combining skills transfer with skills development might well prove helpful in addressing both short-term and long-term leadership development needs.
- Mentoring, but with care when implementing mentoring initiatives it appears important to ensure that the ventures are linked with mentors that have the right leadership skills.

4.5 Peer group learning

Peer group learning has a relatively long tradition in entrepreneurship education, with a widely held view that entrepreneurs and business leaders are often more willing to accept advice from other business leaders or those with a similar background.⁸⁴ Peer group learning or shared learning has a number of potential benefits, summarized in one recent paper as the ability to:

- Challenge and structured critical reflection from different perspectives.
- Different perspectives can bring in new concepts (or old concepts which are new to the learner).
- Shared experimentation can reduce perceived and actual costs risks in trying new things.
- Sharing experiences can provide support and open new lines of inquiry or exploration.
- Shared learning helps explicate systems principles, seeing the patterns—separating 'the wood from the trees'.
- Shared learning provides an environment for surfacing assumptions and exploring mental models outside of the normal experience of



individual organizations—helps prevent 'not invented here' and other effects'.⁸⁵

A number of the models considered here embrace peer group learning as a significant part of their programme:

- The Dutch Growth Accelerator model focuses strongly on peergroup learning with participants assigned to small learning groups early in the programme and remaining in these groups as they progress. Indeed, individuals' willingness to engage in peer-review type processes is one of the selection criteria for the programme.
- The Scottish Companies of Scale programme actively facilitates peer to peer networking among programme participants and graduates and other high growth firms in Scotland through CEO Forums and a Companies of Scale Conference.
- The Irish Management 4 Growth also has the creation of peer group networks as a specific objective with the aim of encouraging peer to peer learning during the programme and sustained business networks afterwards. The Goldman Sachs *10,000 Small Businesses* programme has a similar aspiration running alumni events for current and past programme participants.

In other programmes the peer learning or shared learning components of the programme are less prominent with the potential loss of some of the benefits outlined earlier. Indeed, there is growing empirical evidence which suggests that learning networks may have advantages in terms of both growth and survival, emphasizing the importance of this element of scheme design particularly where participants are younger firms.⁸⁶

4.6 Evaluation

The majority of the programmes profiled here are relatively new – introduced often in the 2009-11 period. At this point, due primarily to the need to wait some time before impacts are identified, rigorous evaluation



evidence on the effectiveness of most of the measures is lacking. Indicative evidence referred to in the brief scheme profiles is almost always positive, however, with take-up generally high.

Two particular issues arise in the evaluation of support for sustained growth. First, in the majority of the schemes considered here there is a strong selection element, the aim being to focus attention on those firms with the strongest growth potential. Any evaluation of the effectiveness of the scheme itself needs to control for this selection element in the process to be able to isolate the value of the scheme itself. This is not straightforward particularly given the likely difficulty of identifying a matched control group. Second, even if selection could be effectively controlled for, the schemes we profile are complex and often offer either holistic support or at least provide a combination of support measures. Which of these elements of the scheme is actually providing most benefit to the firm? This is unlikely to be testable in any ex post quantitative approach.

One evaluation approach which may be able to provide an answer to both questions is a randomised control trial. This type of policy experiment can help to avoid issues of selection and also, if sample sizes are large enough, provide a means of testing the effectiveness of combinations of alternative support measures. SMEs might, for example, be randomly allocated to different types or combinations of support measures and then outcomes compared. To date however we are not aware of any evaluation of this type specifically oriented at SMEs.⁸⁷



5. Re-imagining support for sustained growth

5.1 Introduction

As we indicated in Section 1, the evidence suggests both that the contribution of high growth firms to job growth has fallen in the UK in recent years and that for most individual firms high growth is episodic rather than sustained. The implication is that the UK has lost some ground on its own prior performance in terms of generating jobs from growth firms. How do we redress this balance and create a more conducive business environment which best supports SMEs to achieved sustained and fast growth?

Government have often argued that the UK should provide a world-class environment for doing business. This has shaped the broad framework conditions for businesses of all sizes in the UK, and significant steps have been made over the last couple of years in terms of finance, regulation, tax and skills development. There has also been some development of broadly-based supports for growth businesses such as the Growth Accelerator and Growth Vouchers to be introduced in 2014. Both of these measures reflect the evidence that businesses which take advantage of external support and advice tend to grow faster than those which do not, and that informational barriers exist which sometimes discourage firms from using external advice or support. The evidence also suggests that more intensive forms of public support – involving an in-depth diagnosis and action plan development – are also cost-effective supporting the type of intervention delivered through the Growth Accelerator.⁸⁸

The evidence from the schemes reviewed earlier, and the UK experience with programmes such as the *10,000 Small Businesses* and LEAD programmes, suggests there is more that could be done, particularly for the most strongly growth oriented SMEs. So what guidelines are suggested by the international policy experience if we aim to best support sustained growth in the most aspirational 5-10 per cent of UK small firms?



5.2 Guidelines for implementation

First, it is clear from all of the schemes that a strong element of selfselection is inevitable in terms of the provision of support for sustained growth. Indeed, this is desirable with effective self-selection into pool of applicants for a programme occurring where the costs, commitments and benefits of schemes are transparent so firms can effectively assess the cost-benefit balance. In the Irish Management for Growth programme firms are only able to take advantage of the programme if they make a commitment for the senior management team to attend each of the development workshops. In return the quality of the programme is ensured by a combination of reputable delivery partners and government involvement. Similarly, in the Dutch Growth Accelerator a key element of the self-selection criterion is that firms need to be willing to commit both financial resources and time to the programme and be willing to participate in peer-learning activities. The benefit in return is that the firm will receive high-quality support from the staff of the industry leading organisations which are part of the Growth Stars Consortium. Enabling effective selfselection into fast growth schemes therefore requires a clear proposition from the scheme as well as a clear statement of required commitments. The proposition needs to be both ambitious and emotionally engaging; participating in the scheme needs to carry a certain cachet.

The second guideline is that a strong element of selectivity by the scheme itself is necessary for fast growth programme effectiveness as these programmes are typically intensive and often involve peer-group and shared-learning activities. This inevitably limits cohort size in any particular programme with the Dutch Growth Accelerator working with cohorts of around 15-20 firms at any one time and very similar cohort sizes at each of the UK centres operating the Goldman Sachs *10,000 Small Businesses* programme. The limited size of each cohort may also be seen by firms as a reflection that they belong to a small and elite group of firms. This aids both programme commitment and individuals' willingness to engage in shared-learning activities. Alumni networks can also provide a valuable source of



new business for participants. As one graduate of the Goldman Sachs *10,000 Small Businesses* programme commented:

'I'm now dealing with participants from outside of my particular cohort, businesses that have been vetted by the *10,000 Small Businesses* network, people that have been through the same application process, have been successful on the course and understand my goals and objectives'.

A third guideline is that this selectivity should include the notion of 'national benefits' as suggested by the example of Commercialisation Australia (Section 3.4.2). Here the idea is that firms are selected not simply on the basis of the value they are likely to derive from the programme, their willingness to participate etc. but also on the basis of the social value (or spill-overs) which might be gained from their participation. Such effects may arise in a number of different ways reflecting the impact of training, supply chain effects or the effect of innovative products on markets or the quality of life. Another way of addressing the same issue is adopted by the Goldman Sachs *10,000 Small Businesses* programme which aims to include a number of social enterprises in each cohort to generate positive social as well as economic outcomes.

The fourth guideline is that schemes to support sustained growth are likely to involve continued engagement with a business. For many ownermanagers much of the value is in the opportunity for reflection and the ability – through a shared learning experience – to develop new perspectives on the business. One participant in the Goldman Sachs *10,000 Small Businesses* commented that:

'For me I found the most valuable part was taking yourself out of the business, and looking from the outside in. It gives you a much greater sense of perspective, and you are able to criticise your own business with like-minded people.'



Short programmes such as the four-month Goldman Sachs 10,000 Small Businesses programme and the Growth Accelerator offer a valuable injection of insight and new knowledge and connections into a business with positive outcomes. A key issue for many SMEs, however, is sustaining growth through the medium-term and here the experience of the longer Dutch Growth Accelerator programme and the Companies of Scale programme provides valuable insight. The longest of the schemes considered here is the Dutch Growth Accelerator programme which requires a five-year commitment. The quid pro quo is that the programme aims to help businesses to grow from around €2m to €10m over that period. The Scottish Companies of Scale programme also involves businesses for three or more years in general, aiming to provide similar growth opportunities. It is also notable that firms are often in incubation centres such as that offered by MaRS for 2-3 years so participation in programmes of this length is not necessarily a significant barrier to participation. Growth programmes implemented in the UK have, in general, tended to be shorter. The LEAD programme required firms to engage over a 10 month period while the Goldman Sachs 10,000 Small Businesses programme is a more intensive 4 month programme. Both, however, continue to work with scheme alumni after the end of the formal programme.

A fifth guideline is that sustained growth is likely to require a holistic rather than thematic support model, with a dual focus on the development of the business and the capabilities of the entrepreneur. This is one of the guiding principles of the longer duration schemes considered here – the Scottish Companies of Scale measure and the Dutch Growth Accelerator – and also underlies the holistic approach to support in the Goldman Sachs *10,000 Small Businesses* and LEAD programmes.

Providing this type of holistic support requires expertise in both business and leadership development and suggests the potential value of partnership in the delivery of programmes intended to support sustained growth. The Dutch Growth Accelerator, for example, is operated by a



consortium of four industry leading groups and in the UK Growth Accelerator a similar approach is adopted. Developing the capabilities of business leaders has long been a key objective of business schools and universities and this suggests a potential role for the UK's universities in partnerships to support sustained fast growth. This is, of course, an area where there has been considerable discussion over recent months with the interim report from the Witty Review suggesting that the UK is missing out by not engaging business schools in supporting business growth and development.

A sixth guideline might therefore be that measures to support sustained fast growth should be partnership based. Business schools might provide input on leading edge thinking, leadership development and the facilitation of peer-group or shared learning; other partners such as the banks, Chambers etc. might provide mentoring and other aspects of a support package. A seventh – and related - guideline is also suggested by the operational experience of a number of the schemes outlined here. This is the value of regionally organised delivery. In the Goldman Sachs *10,000 Small Businesses* programme, for example, a regional model has proved valuable in facilitating attendance by firms at scheme events and sessions, and making face-to-face mentoring and peer-group sessions more feasible.

5.3 Final remarks

The UK has a need to maximise its growth potential and fast growing small firms will play a significant role in this growth. As the schemes described in this paper suggest, internationally measures for supporting growth SMEs vary widely including systemic, holistic and thematic measures. UK measures such as the Growth Accelerator can play a significant role here, but more intensive measures such as the Goldman Sachs *10,000 Small Businesses* programme suggest that for at least some firms more intensive, holistic support may help maximise growth potential. The international evidence suggests some guidelines which might underpin the development of any such measures.



Such measures are likely to be local (or more probably regional), partnership based and provide sustained and holistic support over a relatively long period of time. Finance providers have a key role to play here in facilitating business development and helping firms to develop appropriate funding strategies. We also believe, like the recent Business Schools-Medium-Sized Business (MSBs) Task Force, that⁸⁹:

'We are failing to make the most of our world class business schools. There is a widespread recognition that our society, economy and universities are all diminished by a failure to overcome the challenges of connectedness to this important sector. The potential gains of overcoming these challenges are clear: stronger, more resilient MSBs, increased graduate employment opportunities and sustainable UK economic growth' (p. 5).

Over the next couple of months ERC aim to develop more concrete proposals for supporting sustained fast growth SMEs in the UK. We welcome comments or suggestions which we can consider.



NOTES

¹Anyadike-Danes, M Hart, M and Du, J (2012) Firm dynamics and job creation in the UK, ERC White Paper, No. 6.

²Anyadike-Danes et al., (2009) *op. cit.;* NESTA (2009) *The Vital 6 per cent: How high-growth innovative businesses generate prosperity and jobs,* NESTA, London.

³Parker, S. C., Storey, D. J. & van Witteloostuijn, A. 2010. What happens to gazelles? The importance of dynamic management strategy. *Small Business Economics*, 35, 203-226.

⁴ Anyadike-Danes, M., Bonner, K., Hart, M. & Mason, C. 2009. Measuring business growth: high growth firms and their contribution to employment in the UK. London: NESTA, p. 31.

⁵ This chapter draws strongly on the authors' contribution to OECD (2012) 'An International Benchmark analysis of public programmes for high growth firms'. Available at: <u>http://www.oecd.org/industry/high-growthreport.htm</u>.

⁶ OECD 2008 Working Party on SMEs and Entrepreneurship (WPSMEE) Review of HGSMEs, innovation and intellectual property, p. 23.

⁷Llisterri, J and Garcia-Alba, J (2008) 'HGSMEs in Latin American Emerging Economies', paper prepared for the OECD Kansas City Workshop, 2008.

⁸Storey, D. J. 1994. Understanding the Small Business Sector, London, Routledge.

⁹Capelleras, J.-L., Mole, K. F., Greene, F. J. & Storey, D. J. 2008. Do more heavily regulated economies have poorer performing new ventures? Evidence from Britain and Spain. Journal of International Business Studies, 39.



¹⁰Audretsch, D. B. 2005. The knowledge spill-over theory of entrepreneurship and economic growth In: VINIG, G. T. & VAN DER VOORT, R. C. (eds.) The emergence of entrepreneurial economics, Elsevier.

¹¹Hoang, H. Antoncic, B. 2003.Network-based research in entrepreneurship - A critical review. Journal of Business Venturing, 18, 165-187. Zhao, X. Y., Frese, M. & Giardini, A. 2010. Business owners' network size and business growth in China: The role of comprehensive social competency. Entrepreneurship And Regional Development, 22, 675-705.

¹² Bennett, R. 2008. SME policy support in Britain since the 1990s: what have we learnt? Environment and Planning C-Government And Policy, 26, 375-397.

¹³ Metcalfe, S. 1997. Technology Systems and Technology Policy in an Evolutionary Framework, Cambridge University Press.

¹⁴Autio, E Kronlund, M and Kovalainen, A (2007) High-Growth SME Support Initiatives in Nine Countries: Analysis, Categorization, and Recommendations, Report prepared for the Finnish Ministry of Trade and Industry.

¹⁵ Available at: <u>http://www.business.gov.sg</u>.

¹⁶ Available at: http://www.acc10.cat/ACC10/cat/.

¹⁷Levie, J. and E. Autio (2013). Growth and growth intentions - a metaanalysis of existing evidence, White Paper No 1., Enterprise Research Centre.

¹⁸See <u>www.enterprise-ireland.com</u> and discussion of the programme at http://www.oecd.org/secure/pdfDocument/0,2834,en_21571361_38013663 _39137502_1_1_1_00.pdf.



¹⁹Bramwell, A Nelles, J and Wolfe, D A (2008) 'Knowledge, Innovation and Institutions: Global and Local Dimensions of the ICT Cluster in Waterloo, Canada', *Regional Studies*, 42, 1, p. 105.

²⁰Cassar, G and Holmes, S (2003) 'Capital Structure and the financing of SMEs: Australian evidence', Accounting and Finance, 43, pp 123-147. Bhaird, C and Lucey, B (2006) An Explanatory Cross-Sectional study of the capital structures of Irish SMEs' paper presented at the International Conference on the Financing of SMEs at CSME, Warwick Business School.

²¹Levitsky, J and Prasad, R N (1989) 'Credit Guarantee Schemes for Small and Medium Enterprises', World Bank Technical Paper No. 58, New York; Duan, H Han, X and Y, Hongbo (2009) 'An analysis of causes for SMEs financing difficulties', International Journal of Business and Management, 4,6, June 2009, 73-75.

²² See Stinchcombe, Arthur L. (1965). Social Structure and Organizations. In the Handbook of Organizations, James G. March (Ed.).Chicago: Rand McNally & Co. On access to capital specifically see also: Coleman, S (2004) 'The Liability of newness and small firm access to debt capital: Is there a link?', Paper presented at the Annual Conference of the Academy of Entrepreneurial Finance, April 29, 2004, Washington D.C.

²³ Ono, A and Uesugi, I (2005) 'The role of collateral and personal guarantees in relationship lending: evidence from Japan's small business loan market', paper presented at the International Conference on Financing of SMEs in Developed Countries, CSME, Warwick Business School.

²⁴Fraser, S., et al. (2013). What Do We Know About The Relationship Between Entrepreneurial Finance and Growth? Enterprise Research Centre.



²⁵On SMEs particularly see, for example, Watson, R and Wilson, N (2002) 'SME financing: a note on some of the empirical implications of a pecking order, Journal of Business Finance and Accounting, 29, 557-578. More generally see: Frank, M Z and Goyal, V K (2003) 'Testing the pecking order theory of capital structure', Journal of Financial Economics, 67, 217-248.

²⁶Measures to promote investment readiness have been adopted in a number of countries including the UK (Access to Finance Programme - <u>www.gos.gov.uk/gol/European_funding/Objective_2/Obj2_accesstofinance</u>), Spain and Greece (Entrepreneurship Environment and Policies: Exploiting the Science and Technology Base in the Region of Halle", in: *OECD LEED Local Entrepreneurship Series*, January 2007).

²⁷ See, for example, http://www.ytko.com/for-economic-development/finance.

²⁸ See, for example, Robinson, M J and Cotterell, T J (2007) 'Investment patterns of informal investors in the Alberta private equity market', Journal of Small Business Management, 45, 1, pp. 47-67.

²⁹Bosma, N and Stam, E (2012) 'Local Policies for High-Employment Growth Enterprises', Report prepared for the OECD/DBA International Workshop on "High-growth firms: local policies and local determinants", Copenhagen, 28 March 2012.

³⁰Bosma and Stam (2012), op. cit.

³¹ Levy, C Lee, N and Peate, A (2011) 'Ready Steady Grow? How the government can support the development of more high growth firms' – A joint Cities 2020 and Knowledge economy programme report, The Work Foundation, p. 28.

³² Cox, S. (2007) Leading Enterprise and Development, Lancaster University Management School.



³³Source:http://www.goldmansachs.com/citizenship/10000-smallbusinesses/UK/news-and-events/10ksb-uk-progress-report-PDF.pdf.

³⁴Avinimelech, G Schwartz, D and Bar-El, Raphael (2007) 'Entrepreneurial high-tech cluster development: Israel's experience with venture capital and technological incubators', European planning studies, 15, 9, p, 1185.

³⁵Op. Cit. p. 1195.

³⁶Avinimelech, G Schwartz, D and Bar-El, Raphael (2007) 'Entrepreneurial high-tech cluster development: Israel's experience with venture capital and technological incubators', European planning studies, 15, 9, p. 1185.

³⁷ Duff, A (1994) Best Practice in Business Incubator management, AUSTEP Strategic Partnering Pty Ltd, Available at: <u>http://www.eifn.ipacv.ro/include/documentations_files/bestpracrpt.pdf</u>.

³⁸Henrekson, M., Johansson, D. and Stenkula, M. (2010). Taxation, Labor Market Policy and High-Impact Entrepreneurship, Journal of Industry, Competition and Trade 10(3): 275-296.

³⁹ It would also perhaps be relevant to consider measures such as the Swedish National Incubator Programme and MaRS as systemic measures as both also aim to change the business landscape.

⁴⁰Bennett, R. J. and P. J. A. Robson (2004)."The role of trust and contract in the supply of business advice." Cambridge Journal Of Economics 28(4): 471-488.

⁴¹ This section is derived from <u>Chapter 4, Denmark's Growth Houses</u> by Vibeke Vad Baunsgaard, Franziska Günzel and Prof.Helle Neergard, Aarhus University, in OECD LEED Programme (2012) "An international benchmark analysis of public programmes for high-growth firms', Paris.



⁴²Ministry of Economic and Business Affairs (2011a). Aftalemellem KL ogØkonomi- ogErhvervsministerietomVæksthusenei 2012, p. 2.

⁴³Wren C. and D. Storey (2002). Evaluating the effect of soft business support upon small firm performance. Oxford University Press.

⁴⁴Ministry of Economic and Business Affairs (2011a).Aftale mellem KL og Økonomi- og Erhvervsministeriet om Væksthusene i 2012, p. 1.

⁴⁵Ministry of Economic and Business Affairs (2011).Aftale mellem KL og Økonomi- og Erhvervsministeriet om Væksthusene i 2012, p. 1-2.

⁴⁶Wren C. and D. Storey (2002).Evaluating the effect of soft business support upon small firm performance. Oxford University Press.

⁴⁷Ministry of Economic and Business Affairs (2011). Aftale mellem KL og Økonomi- og Erhvervsministeriet om Væksthusene i 2012, p. 2.

⁴⁸Ministry of Economic and Business Affairs (2011). Aftale mellem KL og Økonomi- og Erhvervsministeriet om Væksthusene i 2012.

⁴⁹ Iris Group (2013) 'Fact sheet: calculation of socio-economic yield of investments in "Vaeksthuset", April 2013. Document provided by the Danish Business Agency.

⁵⁰ This section is derived from Chapter 13, The U.S. Jobs and Innovation Accelerator Challenge by Prof. Tom Kemeny, University of North Carolina, in OECD LEED Programme (2012), Op cit.

⁵¹ Economic Development Administration (2012) Announcement of Federal Funding Opportunity: Advanced Manufacturing Jobs and Innovation Accelerator Challenge.

⁵²National Science and Technology Council, (2012) A National Strategic Plan for Advanced Manufacturing, Executive Office of the President. February p.8.



⁵³ This section is derived from chapter 12. Sweden's national incubator program by Prof.Åsa Lindholm-Dahlstrand, Lund University in OECD LEED Programme (2012), Op cit.

⁵⁴ This section is derived from Chapter 14. Ontario's Medical and Related Science Discovery District by Prof. Rebecca Reuber, University of Toronto and Prof. Eileen Fisher, York University in OECD LEED Programme (2012), Op cit. See also the MaRS website (www.marsdd.com).

⁵⁵ This section is derived from Chapter 6. The Netherlands' growth accelerator by Monique Rjinders, Technopolis-Netherlands, in OECD LEED Programme (2012), Op cit.

⁵⁶ The total annual Dutch entrepreneurship policy budget is not easy to determine since it is divided among various ministries in addition to the Ministry of EA&I and among various programmes. The annual budget for the Entrepreneurship and Innovation departments within the Ministry of EA&I alone for 2009 was two billion Euros. Thus, the Growth Accelerator Programme budget at an average of one million Euros per year is a very small part of the total Dutch entrepreneurship policy budget.

⁵⁷ Growth Accelerator (2011) InformatieGroeiversneller,
http://www.groeiversneller.n/wp-content/uploads/2012/05/algemene info_
PG _12082011.pdf.

⁵⁸Growth Accelerator (2012),

http://www.groeiversneller.nl/informatie/programma-groeiversneller/.

⁵⁹ Source: Brown, R and Mawson, S (2012) 'Scotland's Companies of Scale Programme' in OECD (2012) 'An international benchmark analysis of public programmes for high-growth firms', Paris.



⁶⁰ Scottish Enterprise operates an "account management" programme, where 2,000 high performing Scottish firms have a dedicated "account manager". The Companies of Scale programme operates a similar system of intensive account management.

⁶¹Brown, R. and S. Mawson (Forthcoming), "Trigger Points and High Growth Firms: A Conceptualisation and Review of Public Policy Implications", Journal of Small Business and Enterprise Development.

⁶² The GlobalScot programme seeks to develop and expand Scotland's standing in the global business community by utilising the talents of leading Scots, and of people with an affinity for Scotland, to establish a worldwide network of individuals who are outstanding in their field. Scottish companies can freely draw on this network for advice, contacts, assistance and support.

⁶³ This section is derived from Chapter 8. Germany's high-tech grunderfonds by Dr. Thomas Stahlecker, Fraunhofer Institute in OECD-LEED Programme (2012), Op cit.

⁶⁴ This section is derived from Chapter 9, Commercialisation Australia by Donna Valenti and Stephan Broch, Australia's Government Department of Innovation in OECD-LEED Programme (2012), Op cit.

⁶⁵ This section is derived from Chapter 10, England's Growth Accelerator by Stephen Roper in OECD-LEED Programme (2012), Op cit.

⁶⁶ The contract notice was published in the Official Journal S69, 8th April 2011, No.112706.

⁶⁷ Public investment in the GrowthAccelerator Programme is projected to be c£200m over three years and throughput was anticipated as being 26,000 SMEs. Source: <u>http://news.bis.gov.uk/Press-Releases/-200-million-</u> <u>programme-delivers-growth-support-to-ambitious-SMEs-67a65.aspx</u>.



⁶⁸ This section is derived from Chapter 11, Ireland's Management for Growth Programme by Prof. Tom Cooney, Dublin Institute of Technology, in OECD- LEED Programme (2012), Op cit.

⁶⁹ Burke, A., et al. (2010). "The Multiple Effects of Business Planning on New Venture Performance.". Journal of Management Studies 47(3): 391-415. Rotger, G. P., et al. (2012). "Assessing the effectiveness of guided preparation for new venture creation and performance: Theory and practice". Journal of Business Venturing, 27, 4, 506-521.

⁷⁰Cantner, U. and S. Kosters (2012). "Picking the winner? Empirical evidence on the targeting of R&D subsidies to start-ups." Small Business Economics 39(4): 921-936. Freel, M. (1998), "Policy, prediction and growth: Picking start-up winners?", Journal of Small Business and Enterprise Development, Vol. 5, No. 1, pp. 19-32.

⁷¹ OECD, 2012, Op. Cit., p. 87.

⁷² OECD, 2012, Op. Cit., p. 66.

⁷³ More common is the use of this type of justification for fast-growth schemes in their entirety. Few schemes consider the potential social benefits of individual projects although for an illustrative methodology see Roper, S., et al. (2004). "An Ex Ante Evaluation Framework for the Regional Benefits of Publicly Supported R&D Projects." Research Policy 33: 487-509.

⁷⁴Czarnitzki, D. and K. Kraft (2012). "Spillovers of innovation activities and their profitability." Oxford Economic Papers-New Series 64(2): 302-322.

⁷⁵Anselin, L., et al. (1997). "Local Geographic spillovers between University research and high technology innovations." Journal of Urban Economics 42: 422-448. Hewitt-Dundas, N. (2012). "Research intensity and knowledge transfer activity in UK universities." Research Policy 41(2): 262-275.



⁷⁶Holbrook, J. B. and R. Frodeman (2011). "Peer review and the ex ante assessment of societal impacts", *Research Evaluation*, 20, 3 239-246.

⁷⁷ OECD, 2012, Op. Cit., p. 135.

⁷⁸Brown, R. and S. Mawson (Forthcoming), "Trigger Points and High Growth Firms: A Conceptualisation and Review of Public Policy Implications", Journal of Small Business and Enterprise Development.

⁷⁹Bessant, J. Phelps, R. and Adams, R. (2005), External knowledge: A review of the literature addressing the role of external knowledge and expertise at key stages of business growth and development, Advanced Institute of Management Research, London, p. 35.

⁸⁰Vohora, A., Wright, M. and Lockett, A. (2004), "Critical junctures in the development of university high-tech spinout companies", Research Policy, Vol. 33 No. 1, p. 148.

⁸¹Brown, R. and S. Mawson (Forthcoming), "Trigger Points and High Growth Firms: A Conceptualisation and Review of Public Policy Implications", Journal of Small Business and Enterprise Development.

⁸² This section draws on Autio, E (2013) 'Promoting leadership development in high-growth new ventures', Discussion Paper, OECD Paris, June.

⁸³Autio, E (2013) 'Promoting leadership development in high-growth new ventures', Discussion Paper, OECD Paris, June.

⁸⁴Fischer, E. and Reuber, A. R. (2003), "Support for Rapid-Growth Firms: A Comparison of the Views of Founders, Government Policymakers, and Private Sector Resource Providers", Journal of Small Business Management, Vol. 41 No. 4, pp. 346-365.



⁸⁵Bessant, J., et al. (2012). "Developing innovation capability through learning networks". *Journal of Economic Geography*, 12, 5, p. 1091.

⁸⁶Brüderl J and Preisendörfer P (1998) Network support and the success of newly-founded business. *Small Business Economics* 10(3): 213–225. Watson, J. (2012). "Networking: Gender differences and the association with firm performance." International small business journal, 30, 5, 536-558.

⁸⁷ In this sense the planned UK growth voucher RCT is unique although this relates to a significantly simpler type of intervention than many of those profiled here.

⁸⁸ It is also important to recognise that policy supports for growth businesses differ in different UK nations. The Companies of Scale scheme discussed in Section 3.3.4, for example, is only available as part of Scottish Enterprise's suite of programmes alongside their account management system.

⁸⁹See: <u>https://www.gov.uk/government/uploads/system/uploads/attachment</u> _data/file/34703/12-1290-business-school-mid-sized-businesscollaboration.pdf, p. 5.



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